
Recommendations for Complying With Over-the- Counter Monograph Procedure for Minor Changes C001: Minor Changes to Solid Oral Dosage Forms for Certain Over- the-Counter Monograph Drugs Guidance for Industry

DRAFT GUIDANCE

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**U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)**

**June 2025
Over-the-Counter**

Over-the-Counter Monograph Procedure for Minor Changes C001: Minor Changes to Solid Oral Dosage Forms for Certain Over-the-Counter Monograph Drugs Guidance for Industry

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**Recommendations for Complying
With Over-the-Counter Monograph Procedure for Minor Changes
C001: Minor Changes to Solid Oral Dosage Forms for Certain
Over-the-Counter Monograph Drugs
Guidance for Industry¹**

This draft guidance, when finalized, will represent the current thinking of the Food and Drug Administration (FDA or Agency) on this topic. It does not establish any rights for any person and is not binding on FDA or the public. You can use an alternative approach if it satisfies the requirements of the applicable statutes and regulations. To discuss an alternative approach, contact the FDA staff responsible for this guidance as listed on the title page.

1. INTRODUCTION

This guidance provides recommendations for how requestors² can comply with the requirements described in Proposed Administrative Order (OTC000038) titled Over-the-Counter Monograph Procedure for Minor Changes C001: Minor Changes to Solid Oral Dosage Forms for Certain Over-the-Counter Monograph Drugs (hereinafter referred to as C001). The recommendations in this guidance are intended to assist requestors when making a minor change in the dosage form of an over-the-counter (OTC) monograph drug as described in 505G(c) of the Federal Food, Drug, and Cosmetic Act (FD&C Act)³ and, if finalized, C001. Specifically, this guidance provides recommendations for demonstrating that a minor change in a solid oral dosage form from a tablet or capsule to a chewable tablet, orally disintegrating tablet (ODT), or film will not affect the safety or effectiveness of the drug. It also provides recommendations for demonstrating that such a change will not materially affect the extent of absorption or other exposure to an active ingredient in the drug in comparison to a suitable reference product.⁴

The recommendations provided in this guidance apply to nonprescription drugs marketed under section 505G of the FD&C Act, referred to as OTC monograph drugs.⁵ The recommendations provided in this guidance do not apply to drugs that are the subject of an application submitted

¹ This guidance has been prepared by the Office of Pharmaceutical Quality, Office of New Drugs, and Office of Regulatory Policy in the Center for Drug Evaluation and Research at the Food and Drug Administration.

² In § C001.2(a) of Over-the-Counter Monograph Procedure for Minor Changes C001: Minor Changes to Solid Oral Dosage Forms for Certain Over-the-Counter Monograph Drugs (hereinafter referred to as C001), FDA proposes defining *requestor* as “[a]ny person or group of persons marketing, manufacturing, processing, or developing a drug,” consistent with the definition of *requestor* under section 505G(q)(3) of the Federal Food, Drug, and Cosmetic Act (FD&C Act) (21 U.S.C. 355h(q)(3)).

³ See 21 U.S.C. 355h(c).

⁴ See C001

⁵ See definition of OTC monograph drug in section 744L(5) of the FD&C Act (21 U.S.C. 379j-71(5)).

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35 under section 505(b) or section 505(j) of the FD&C Act⁶ or biological products that are the
36 subject of an application submitted under section 351 of the Public Health Service Act.⁷

37
38 In general, FDA's guidance documents do not establish legally enforceable responsibilities.
39 Instead, guidances describe the Agency's current thinking on a topic and should be viewed only
40 as recommendations, unless specific regulatory or statutory requirements are cited. The use of
41 the word *should* in Agency guidances means that something is suggested or recommended, but
42 not required.

43
44

45 II. BACKGROUND

46

47 On March 27, 2020, the President signed into law the Coronavirus Aid, Relief, and Economic
48 Security Act (CARES Act). In addition to its other measures, the CARES Act added section
49 505G to the FD&C Act. Section 505G reforms and modernizes the framework for the regulation
50 of OTC monograph drugs.⁸ OTC monograph drugs may be marketed without an approved drug
51 application under section 505 of the FD&C Act if they meet the requirements of section 505G of
52 the FD&C Act, as well as other applicable requirements.

53
54 Under the process described in section 505G(c) of the FD&C Act, requestors can make minor
55 changes in the dosage form of an OTC monograph drug without the issuance of an order under
56 section 505G(b) of the FD&C Act⁹ for the new dosage form if they maintain information
57 necessary to demonstrate that the change: (1) will not affect the safety or effectiveness of the
58 drug; and (2) will not materially affect the extent of absorption or other exposure to the active
59 ingredient(s) in comparison to a suitable reference product.¹⁰ The change must also be in
60 conformity with the requirements of an applicable administrative order issued under section
61 505G(c)(3) of the FD&C Act.¹¹

62
63 FDA is issuing proposed C001 under section 505G(c)(3) of the FD&C Act. This proposed order,
64 if finalized, will specify the requirements that must be met for a minor change in dosage form of
65 an OTC monograph drug from a capsule or tablet to a chewable tablet, ODT, or film.

66
67

68 III. GENERAL 505G(c) PRODUCT AND SUITABLE REFERENCE PRODUCT 69 CRITERIA

70

71 Section 505G(c) of the FD&C Act allows for a minor change in the dosage form of certain drugs
72 marketed under section 505G of the FD&C Act, without the issuance of an order under section
73 505G(b) of the FD&C Act adding the new dosage form to an applicable OTC monograph or
74 otherwise finding the new dosage form to be generally recognized as safe and effective

⁶ See 21 U.S.C. 355(b) and (j).

⁷ See 42 U.S.C. 262.

⁸ The CARES Act also added section 744M (21 U.S.C. 379j-72), among related provisions, to the FD&C Act authorizing FDA to assess and collect user fees to support OTC monograph drug activities.

⁹ See 21 U.S.C. 355h(b).

¹⁰ See section 505G(c)(1)(A) of the FD&C Act.

¹¹ See section 505G(c)(1)(B) of the FD&C Act.

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75 (GRASE), when certain criteria are met. Specifically, section 505G(c)(1) of the FD&C Act
76 permits such minor dosage form changes to an OTC monograph drug that meets applicable
77 monograph conditions or is otherwise the subject of an order under section 505G(b) of the
78 FD&C Act¹² provided the requestor maintains information necessary for the demonstrations
79 described in section II above with respect to the change. Further, the change must conform to
80 requirements of an applicable order issued under section 505G(c)(3) of the FD&C Act. Such an
81 order specifies requirements for determining whether a particular minor dosage form change to a
82 drug will affect the safety or effectiveness of the drug or materially affect the extent of
83 absorption or other exposure to an active ingredient in the drug in comparison to a suitable
84 reference product.

85
86 In issuing proposed C001 under section 505G(c)(3) of the FD&C Act, FDA proposes criteria
87 that, if met, would allow a requestor to market a 505G(c) product¹³ with a minor dosage form
88 change from tablets or capsules to chewable tablets, ODTs, or films, without an order issued
89 under section 505G(b) of the FD&C Act amending an applicable monograph to add the new
90 dosage form (or otherwise finding the new dosage form to be GRASE). Such criteria include that
91 the 505G(c) product must have the same active ingredient(s),¹⁴ same strength, same labeled
92 indication, and same route of administration as the suitable reference product to which it is being
93 compared.¹⁵ Further, in accordance with C001, if finalized, both the 505G(c) product and the
94 suitable reference product must be orally administered, immediate-release drug products in a
95 solid dosage form and must contain active ingredients that are systemically absorbed, highly
96 soluble, and highly permeable.¹⁶

IV. INFORMATION TO SUPPORT A 505G(c) MINOR DOSAGE FORM CHANGE

100
101 Drug absorption from orally administered, immediate-release solid dosage forms is affected by
102 the solubility and intestinal permeability of the active ingredient and the dissolution of the drug
103 product. For highly soluble and highly permeable active ingredients with systemic absorption,
104 FDA proposes that multimedia dissolution testing demonstrating the rapid dissolution of both the
105 suitable reference product and the 505G(c) product is appropriate to demonstrate that the minor
106 change in dosage form will not materially affect the extent of absorption or other exposure to the
107 active ingredient in comparison to a suitable reference product.^{17,18}

¹² The OTC Monographs as set forth in Final Administrative Orders are available via the OTC Monographs@FDA portal at <https://dps.fda.gov/omuf>.

¹³ In § C001.2(d) of C001, the Agency proposes defining *505G(c) product* as “[a] drug that incorporates a minor dosage form change made in accordance with the requirements of section 505G(c) and [C001].”

¹⁴ For the purposes of selecting a suitable reference product, the *same active ingredient* includes the salt or ester form of the active ingredient.

¹⁵ See § C001.10(b) of C001.

¹⁶ See §§ C001.10(c) and (d) of C001.

¹⁷ For more on the use of a scientific- and risk-based approach grounded in the biopharmaceutics classification systems, see Amidon GL, Lennernäs H, Shah VP, and Crison JR, 1995, A Theoretical Basis for a Biopharmaceutic Drug Classification: The Correlation of In Vitro Drug Product Dissolution and In Vivo Bioavailability, *Pharm Res*, 12:413–420.

¹⁸ See § C001.20(a) of C001.

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109 The following sections provide recommendations for demonstrating that a dosage form change
110 meets the requirements of C001, if finalized. The testing procedures described below are like
111 those described in the ICH guidance for industry *M9 Biopharmaceutics Classification System-*
112 *Based Biowaivers* (May 2021)¹⁹ but have been modified to make them appropriate for OTC
113 monograph drugs.

114
115 Solubility and permeability are active ingredient-specific characteristics; however, dissolution is
116 a product-specific characteristic, which may be impacted by product formulation or
117 manufacturing. Therefore, each time a requestor makes any formulation change or makes a
118 change in the manufacturing process related to the dosage form that is subject to C001 that could
119 impact the dissolution profile, the drug with that change or changes will need to meet the
120 requirements of C001, if finalized, for that dosage form to remain compliant with and
121 permissible under section 505G(c) of the FD&C Act.

A. Solubility

122
123 An active ingredient is classified as highly soluble if the highest single therapeutic dose is
124 completely soluble in 250 mL or less of aqueous media over the pH range of 1.2 to 6.8 at
125 37±1°C. The requestor should evaluate the solubility at equilibrium in at least three pH
126 conditions, including in buffers at pH 1.2, 4.5, and 6.8.²⁰ Buffers should be prepared as described
127 in the United States Pharmacopeia (USP),²¹ and the pH should be verified (i.e., measured and
128 adjusted) after addition of the active ingredient and at the end of the solubility study to ensure the
129 solubility measurements are obtained under the specified pH. The requestor should conduct a
130 minimum of three replicate solubility determinations for each pH over a time frame suitable to
131 reach equilibrium using a shake-flask technique or an alternative method capable of adequately
132 predicting the equilibrium solubility of the active ingredient. Small volumes of solubility media
133 can be used if the available experimental apparatus will permit it. Alternatively, solubility
134 experiments where the highest therapeutic single dose is examined in a 250 mL volume, or a
135 proportionally smaller amount examined in a proportionally smaller volume of buffer, can be
136 used to demonstrate high solubility.

137
138
139 The concentration of the active ingredient in each buffer should be determined using a suitably
140 validated method²² that can distinguish the active ingredient from its degradation products.
141 Samples should be filtered before analysis. Any degradation of the active ingredient should be
142 documented. If degradation is >10%, solubility cannot be adequately determined, and the active
143 ingredient solubility cannot be classified. The lowest measured solubility over the pH range of
144 1.2 to 6.8 is used to classify the active ingredient. Published peer-reviewed literature data are one
145 way to substantiate and support solubility determinations.

¹⁹ We update guidances periodically. For the most recent version of a guidance, check the FDA guidance web page at <https://www.fda.gov/regulatory-information/search-fda-guidance-documents>.

²⁰ See USP General Chapter <1236> *Solubility Measurements* for more information on the effect of pH on solubility measurements and methods for determination of equilibrium solubility.

²¹ See USP Reagents and Reference Tables for Buffer Solutions.

²² See the guidance for industry *Analytical Procedures and Methods Validation for Drugs and Biologics* (July 2015).

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B. Permeability

149

150 Active ingredient permeability can be determined by either in vivo or in vitro methods. In vivo
151 permeability can be based on the extent of absorption derived from human pharmacokinetic
152 studies (e.g., absolute bioavailability or mass balance). High permeability can be concluded
153 when the absolute bioavailability is $\geq 85\%$. High permeability can also be concluded if $\geq 85\%$ of
154 the administered dose is recovered in urine as unchanged (parent drug), or as the sum of parent
155 drug, Phase 1 oxidative and Phase 2 conjugative metabolites. Regarding metabolites in feces,
156 only oxidative and conjugative metabolites can be considered. Metabolites produced through
157 reduction or hydrolysis should not be included, unless the requestor maintains information to
158 demonstrate that they are not produced before absorption (e.g., by microbial action within the
159 gastrointestinal tract). As a scientific matter, unchanged drug in feces cannot be counted toward
160 the extent of absorption, unless appropriate data support that the amount of parent drug in feces
161 to be accounted for absorbed drug material is from biliary excretion or intestinal secretion or
162 originates from an unstable metabolite (e.g., glucuronide, sulfate, N-oxide) that has been
163 converted back to the parent by the action of microbial organisms.

164

165 Human in vivo data derived from published peer-reviewed literature (e.g., product knowledge
166 and bioavailability studies) can be appropriate; however, caution should be used when relying on
167 peer-reviewed literature as such literature might not contain the necessary details of the testing to
168 make a judgment regarding the quality of the results.

169

170 Permeability can also be determined by validated and standardized in vitro methods using Caco-
171 2 cells. Caco-2 epithelial cell monolayers derived from a human colon adenocarcinoma cell line
172 are widely used to estimate intestinal drug absorption in humans. Caco-2 cells undergo
173 spontaneous morphological and biochemical enterocytic differentiation and express cell polarity
174 with an apical brush border, tight intercellular junctions, and several active transporters as in the
175 small intestine. However, due to a potential for low or absent expression of efflux (e.g., P-gp,
176 BCRP, MRP2) and uptake (e.g., PepT1, OATP2B1, MCT1) transporters, the use of Caco-2 cell
177 assays as the sole data in support of high permeability classification is limited to passively
178 transported drugs. If high permeability is inferred by Caco-2 cell assays, the requestor should
179 demonstrate that permeability is independent of active transport.

180

181 When using Caco-2 cell assays for permeability determination, requestors should demonstrate
182 suitability by establishing a rank-order relationship between experimental permeability values
183 and the extent of drug absorption in human subjects using zero, low ($<50\%$), moderate (50% to
184 84%), and high ($\geq 85\%$) permeability model drugs. A sufficient number of model drugs are
185 recommended for the validation to characterize high, moderate, and low permeability (minimum
186 of five for each), plus a compound with proven zero permeability (see Table 1 for examples).
187 Further, a sufficient number (minimum of three) of cell assay replicates should be employed to
188 provide a reliable estimate of drug permeability. The established relationship should permit
189 differentiation between low, moderate, and high permeability drugs. Caco-2 cell monolayer
190 integrity should be confirmed by comparing transepithelial electrical resistance measures and/or
191 other suitable indicators, before and after an experiment. In addition, cell monolayer integrity
192 should be demonstrated by means of compounds with proven zero permeability (see Table 1).

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194 Method validation data should include a list of the selected model drugs, along with data on
195 extent of absorption in humans (mean, standard deviation, and coefficient of variation) used to
196 establish suitability of the method, permeability values for each model drug (mean, standard
197 deviation, and coefficient of variation), permeability class of each model drug, and a plot of the
198 extent of absorption as a function of permeability (mean \pm standard deviation or 95% confidence
199 interval) with identification of the high permeability class boundary and selected high
200 permeability model drug used to classify the active ingredient. A description of the study
201 method, drug concentrations in the donor fluid, description of the analytical method, and
202 equation used to calculate permeability should be recorded. Additionally, information on efflux
203 potential (e.g., bidirectional transport data) should be recorded for a known substrate.
204

205 When conducting Caco-2 cell assays, the requestor should demonstrate passive transport of the
206 active ingredient being tested. This can be verified using a suitable assay system that expresses
207 known efflux transporters. For example, the requestor can demonstrate independence of
208 measured in vitro permeability on initial drug concentration (e.g., 0.01, 0.1, and 1 times the
209 highest strength dissolved in 250 mL) or transport direction (efflux ratio, i.e., ratio of apparent
210 permeability between the basolateral-to-apical and apical-to-basolateral directions <2 for the
211 selected drug concentrations). The requestor should verify functional expression of efflux
212 transporters by using bidirectional transport studies demonstrating asymmetric permeability of
213 selected efflux transporter substrates (e.g., digoxin, vinblastine, rhodamine 123) at nonsaturating
214 concentrations.
215

216 The requestor should justify the concentrations of the active ingredient used in the permeability
217 studies. A validated Caco-2 method used for drug permeability determinations should employ
218 conditions established during the validation and include a moderate and a high permeability
219 model drug in the donor fluid along with the active ingredient being tested as internal standards
220 to demonstrate consistency of the method. The requestor should choose internal standards based
221 on compatibility with the active ingredient (i.e., they should not exhibit any significant physical,
222 chemical, or permeation interactions). The permeability of the internal standards can be
223 determined following evaluation of the active ingredient in the same monolayers or monolayers
224 in the same plate when it is not feasible to include internal standards in the same cell culture well
225 as the active ingredient permeability evaluation. The permeability values of the internal
226 standards should be consistent between different tests, including those conducted during method
227 validation, and the requestor should set acceptance criteria for the internal standards and model
228 efflux drug. The requestor should assess mean drug and internal standards recovery at the end of
229 the test. For recoveries $<80\%$, a mass balance evaluation should be conducted, including
230 measurement of the residual amount of drug in the cell monolayer and testing apparatus.
231

232 Evaluation of active ingredient permeability can be facilitated by selection of a high permeability
233 internal standard with permeability in close proximity to the moderate/high permeability class
234 boundary. The active ingredient is considered highly permeable when its permeability value is
235 equal to or greater than that of the selected internal standard with high permeability.²³
236 Information to support high permeability of an active ingredient (mean, standard deviation, and
237 coefficient of variation) should include permeability data on the active ingredient, the internal
238 standards, in vitro gastrointestinal stability information, and data supporting passive transport

²³ See § C001.2(k) of C001.

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239 mechanism. The permeability results from Caco-2 cell assays should be discussed in the context
240 of available data on human pharmacokinetics.

241
242 For both in vivo (i.e., mass balance studies) and in vitro approaches to demonstrating high
243 permeability, requestors should demonstrate stability of the active ingredient in the
244 gastrointestinal tract.²⁴ Stability in the gastrointestinal tract should be documented using
245 compendial or simulated gastric and intestinal fluids. Other relevant methods can be used with
246 suitable justification. Drug solutions should be incubated at 37°C for a period that is
247 representative of the in vivo contact of the active ingredient with these fluids (i.e., 1 hour in
248 gastric fluid and 3 hours in intestinal fluid). Drug concentrations should then be determined
249 using a suitably validated method.²⁵ If degradation is >10%, as a scientific matter, permeability
250 cannot be adequately determined, and the active ingredient permeability cannot be classified.

²⁴ As a scientific matter, if a mass balance study demonstrates that ≥85% of the dose of the active ingredient is recovered unchanged in urine, stability in the gastrointestinal tract is considered self-evident, and additional data are not needed.

²⁵ See footnote 22.

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Table 1. Examples of Model Drugs for Permeability Assay Method Validation

Model Drug Classification	Model Drug
High Permeability ($f_a \geq 85\%$)	Antipyrine Caffeine Ketoprofen Naproxen Theophylline Metoprolol Propranolol Carbamazepine Phenytoin Disopyramide Minoxidil
Moderate Permeability ($f_a = 50\%–84\%$)	Chlorpheniramine Creatinine Terbutaline Hydrochlorothiazide Enalapril Furosemide Metformin Amiloride Atenolol Ranitidine
Low Permeability ($f_a < 50\%$)	Famotidine Nadolol Sulpiride Lisinopril Acyclovir Foscarnet Mannitol Chlorothiazide Polyethylene glycol 400 Enalaprilat
Zero Permeability	FITC-Dextran Polyethylene glycol 4000 Lucifer yellow Inulin Lactulose
Efflux Substrates	Digoxin Paclitaxel Quinidine Vinblastine

253

C. In Vitro Dissolution

254

255 Under C001, if finalized, requestors must demonstrate that the suitable reference product and
256 505G(c) product are rapidly dissolving.²⁶ In C001, the Agency proposes that a drug product is
257 considered rapidly dissolving when a mean of 85 percent or more of the labeled amount of the
258 active ingredient dissolves within 30 minutes in at least three different media across a
259 physiological pH range, including but not limited to pH 1.2, 4.5, and 6.8 under a defined set of
260 conditions.²⁷ To demonstrate rapid dissolution, the requestor should conduct comparative in vitro
261 dissolution testing to characterize the dissolution profiles of the suitable reference product and
262 the 505G(c) product using the following conditions:
263

264

- 265 • Apparatus: USP Apparatus 1 (basket) or USP Apparatus 2 (paddle)²⁸
- 266 • Agitation: 100 revolutions per minute for basket apparatus and 50 revolutions per minute
267 for paddle apparatus
- 268 • Volume of dissolution medium: 900 mL or less (FDA recommends the use of the volume
269 selected for quality control dissolution testing)
- 270 • Temperature of dissolution medium: 37±1°C

271

272 Buffers should be prepared as described in the USP.²⁹ Solubility enhancements to the dissolution
273 method, such as the use of organic solvents or the addition of surfactants to the dissolution
274 media, are not appropriate for demonstrating the drug product is rapidly dissolving.³⁰ For gelatin
275 capsules and tablets with gelatin coating where cross-linking has been demonstrated, the addition
276 of enzymes to the dissolution media can be appropriate if adequately justified.³¹

277

278 The dissolution testing apparatus should conform to the requirements in USP General Chapter
279 <711> *Dissolution* and the guidance for industry *The Use of Mechanical Calibration of*
280 *Dissolution Apparatus 1 and 2 — Current Good Manufacturing Practice (CGMP)* (January
281 2010). Selection of the testing apparatus and the testing conditions are dependent on the dosage
282 forms being tested. Testing conditions should be appropriate for the dosage form being tested
283 and do not need to be the same for the suitable reference product and the 505G(c) product.

284

285 If C001 becomes final, at least 12 dosage units of the suitable reference product and the 505G(c)
286 product must be used in each dissolution medium to generate the dissolution profiles.³² Samples
287 should be collected at sufficient time points to characterize the dissolution profiles of the drug

²⁶ See § C001.20(a)(1) of C001.

²⁷ Ibid.

²⁸ See USP General Chapter <711> *Dissolution*.

²⁹ See footnote 21.

³⁰ See USP General Chapter <1092> *The Dissolution Procedure: Development and Validation*.

³¹ See USP General Chapters <711> *Dissolution*, <1092> *The Dissolution Procedure: Development and Validation*,
and <1094> *Capsules—Dissolution Testing and Related Quality Attributes*.

³² See footnote 26.

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291 products (e.g., 5, 10, 15, 20, and 30 minutes). In accordance with C001, if finalized, both the
292 suitable reference product and the 505G(c) product must be rapidly dissolving ($\geq 85\%$ mean
293 dissolved in ≤ 30 minutes).³³

294

295

V. ADDITIONAL PRODUCT-SPECIFIC QUALITY CONSIDERATIONS

296

297 All 505G(c) products must meet applicable monograph conditions and other requirements for
298 being generally recognized as safe and effective, and not misbranded, including, among other
299 things, that the drug products be manufactured in compliance with current good manufacturing
300 practice regulations in 21 CFR parts 210 and 211.³⁴ Requestors should apply the general
301 principles described in ICH and FDA guidance documents and USP General Chapters related to
302 pharmaceutical development and quality standards to 505G(c) products and other OTC
303 monograph drugs, as appropriate.

304

305 All three of the dosage forms that could be marketed subject to C001, if finalized, can be
306 vulnerable to changes in quality due to exposure to high humidity and other external factors. The
307 container closure system of a drug must meet the requirement that container closure systems
308 provide adequate protection against such factors.³⁵ For OTC monograph drugs with a minor
309 change in dosage form, the results of testing conducted to comply with 21 CFR 211.166 must
310 confirm the stability of the drug product in its marketed container closure system over the shelf
311 life of the drug product.

312

313 In addition to the general recommendations above, FDA recommends the following
314 considerations for the dosage forms that are subject to C001.

315

A. Chewable Tablets

316

317 Chewable tablets are intended to be chewed or crushed and then swallowed by the consumer
318 rather than swallowed whole. Critical quality attributes for chewable tablets include, but are not
319 limited to, hardness, disintegration, and dissolution. Additional considerations such as tablet size
320 and taste can affect the ability or willingness of a consumer to chew the chewable tablet. Product
321 attributes should ensure the performance of the chewable tablet for its intended use. See the
322 guidance for industry *Quality Attribute Considerations for Chewable Tablets* (August 2018) for
323 recommendations on critical quality attributes that should be assessed for chewable tablets.

324

B. Orally Disintegrating Tablets

325

326 ODTs are intended to disintegrate rapidly in the mouth on contact with saliva with no need for
327 chewing or drinking liquids to ingest the product. Therefore, palatability and disintegration are
328 critical quality attributes for this dosage form. The Agency recommends that ODTs have an in

³³ Ibid.

³⁴ See section 505G(c)(1) of the FD&C Act (21 U.S.C. 355h(c)(1)); also see 21 CFR 330.1(a) and section 501(a)(2)(B) of the FD&C Act (21 U.S.C. 351(a)(2)(B)).

³⁵ See 21 CFR 211.94(b).

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332 vitro disintegration time of approximately 30 seconds or less using the procedure described in
333 USP General Chapter <701> *Disintegration*.³⁶

334

335 **C. Films**

336

337 Films for oral administration are intended to rapidly disintegrate on the tongue and incorporate
338 the active ingredient into saliva before being swallowed. Palatability, film dimensions, film
339 integrity, and disintegration are critical quality attributes for this dosage form. Film dimensions
340 should be appropriate for the oral route of administration and the intended consumer population.
341 In addition, the film should be substantial enough to maintain its integrity during manufacturing
342 and permit handling by the consumer.

343

344

345 **VI. PACKAGING AND RECORDKEEPING**

346

347 Under section 505G(c) of the FD&C Act, a requestor must maintain information necessary to
348 demonstrate that the minor change in dosage form will not affect the safety or effectiveness of
349 the drug. In § C001.60(a)(1)(B) of C001, the Agency proposes that requestors must maintain
350 information demonstrating that the packaging of 505G(c) products is consistent with the
351 requirements described in Proposed Administrative Order OTC000037 titled Over-the-Counter
352 Monograph Condition B001: Single-Unit or Unit-Dose Containers for Over-the-Counter
353 Monograph Drugs in Orally Disintegrating Tablet and Film Dosage Forms (hereinafter referred
354 to as B001), if finalized.³⁷ This information is necessary to demonstrate that the change in
355 dosage form will not materially affect the extent of absorption or other exposure to the active
356 ingredient in comparison to the suitable reference product or affect the safety or effectiveness of
357 the drug. If B001 is finalized, OTC monograph drugs in an ODT or film dosage form that are
358 subject to an OTC monograph identified in B001 must be packaged in single-unit or unit-dose
359 containers as a condition for being considered generally recognized as safe and effective and not
360 misbranded.

361

362 In B001 FDA proposes that certain OTC monograph drugs in an ODT or film dosage form must
363 be in single-unit or unit-dose containers to address potential safety and efficacy concerns posed,
364 in part, because these dosage forms dissolve quickly in the mouth and are designed to be more
365 palatable than other oral dosage forms such as tablets and capsules. The palatability and rapid
366 dissolution of ODTs and films make them more attractive to and can pose greater risks of
367 accidental ingestion by young children. Moreover, ODTs can break apart when handled or stored
368 in high humidity, which could result in underdosing from a multiple-unit container. Films
369 packaged in multiple-unit containers have the potential to stick together, making it easy for a
370 consumer to inadvertently dose more than one film at the same time.

371

³⁶ See also the guidance for industry *Orally Disintegrating Tablets* (December 2008).

³⁷ As proposed in § C001.60(b), if finalized, the requestor must maintain this information until at least 1 year after the expiration date of the final released batch of the 505G(c) product (see proposed § C001.60(b)(1)), or at least 3 years after distribution of the final released batch of the 505G(c) product if the batches lack expiration dating but meet the criteria described in 21 CFR 211.137(h) (see proposed § C001.60(b)(2)).

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372 Drugs in a chewable tablet dosage form are not designed to rapidly dissolve in the mouth and do
373 not have the same potential to break apart or stick together when handled or stored in high
374 humidity like ODTs and films. However, chewable tablets are designed to be palatable like
375 ODTs and films because they are intended to be chewed. Chewable tablets also have lower
376 hardness values than other oral dosage forms such as tablets and capsules. Because of these
377 attributes, chewable tablets can pose some of the same safety and effectiveness concerns as
378 ODTs and films. Therefore, FDA recommends that 505G(c) products in a chewable tablet
379 dosage form be packaged in single-unit or unit-dose containers.

380
381 As previously noted, all drug products marketed under section 505G of the FD&C Act with
382 minor dosage form changes compliant with section 505G(c) of the FD&C Act must also be
383 manufactured in compliance with current good manufacturing practice regulations in parts 210
384 and 211 so as not to render the drug adulterated under section 501(a)(2)(B) of the FD&C Act.³⁸
385 Records maintained to meet the requirements at §§ 211.180(a) and (b) are sufficient to also meet
386 the proposed requirement at § C001.60(a)(1)(B) of C001.

387
388 FDA reminds sponsors³⁹ that, under section 505G(c)(2) of the FD&C Act, they are required to
389 submit sufficient records and applicable information demonstrating that the requirements under
390 section 505G(c) of the FD&C Act and C001, if finalized, are being met, if requested by FDA
391 under section 704(a)(4) of the FD&C Act⁴⁰ and within 15 business days of receiving such a
392 request, or such longer period as FDA may provide.

393

394

395 VII. DRUG LISTING INFORMATION

396
397 Section 510(j) of the FD&C Act⁴¹ requires registrants to provide to FDA a list of all drugs
398 manufactured, prepared, propagated, compounded, or processed by the registrant for commercial
399 distribution.⁴² Section 505G(e) of the FD&C Act⁴³ requires a sponsor who makes a change to a
400 drug subject to section 505G, including section 505G(c), to submit updated drug listing
401 information in accordance with section 510(j) within 30 calendar days of the date when the drug
402 is first commercially marketed.⁴⁴

403

³⁸ Under 21 CFR part 211, for example §§ 211.180(a) and (b), records for all components, drug product containers, closures, and labeling are required to be maintained.

³⁹ In § C001.2(b) of C001, FDA proposes defining *sponsor* as “[a]ny person marketing, manufacturing, or processing a drug that (1) is listed pursuant to section 510(j) of the FD&C Act; and (2) is or will be subject to an administrative order under section 505G of the FD&C Act,” consistent with the definition of *sponsor* under section 505G(q)(2) of the FD&C Act (21 U.S.C. 355h(q)(2)).

⁴⁰ See 21 U.S.C. 374(a)(4).

⁴¹ See 21 U.S.C. 360(j).

⁴² See section 510(j)(1) of the FD&C Act (21 U.S.C. 360(j)(1)).

⁴³ See 21 U.S.C. 355h(e).

⁴⁴ Section 505G(e) of the FD&C Act also states that “a sponsor who was an order requestor with respect to an order subject to [section 505G(b)(5)(C) of the FD&C Act] (or a licensee, assignee, or successor in interest of such requestor) shall submit updated drug listing information on or before the date when the drug is first commercially marketed.” This provision is not applicable to changes made under the minor dosage form changes provisions in section 505G(c) of the FD&C Act.

Contains Nonbinding Recommendations

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404 The Agency intends to provide more detailed information on how a sponsor should indicate that
405 a drug product is a 505G(c) product as part of submitting drug listing information before
406 finalizing C001.